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June 6, 1997

Linda W. Tape
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VIA FACSIMILE AND FEDERAL EXPRESS

U.S. Environmental Protection Agency
Attn: Carlton D. Cuffman - SM-5J
77 West Jackson Blvd.
Chicago, IL 60604-3590

RECEIVED

SUPERFUND PROGRAM
MANAGEMENT BRANCH

Re: 104(e) Request to Monsanto on the Sauget Sites

Dear Mr. Cuffman:

Monsanto Company ("Monsanto") received a Section 104 (e) Request for Information ("Information Request") regarding the above-titled site. Attached is Monsanto's Response To the Request For Information which incorporates objections to, among other things, the breadth and burdensomeness of the request.

Be assured that Monsanto supports the prompt and efficient cleanup of sites which present an imminent and substantial danger to human health or the environment. Accordingly, please keep us apprised of any new developments regarding the site conditions, additional studies and cleanup plans.

Monsanto has answered this Information Request to the extent possible given the time constraints imposed by EPA. If more information responsive to this request shall become available, Monsanto will supplement its answer at that time.

As to the information provided, Monsanto asserts a business confidentiality claim over some of the information submitted in this response pursuant to 42 U.S.C. §104(e)(7) and 40 C.F.R. §2.203. In each instance, every page of the material for which a claim of confidentiality is asserted is marked "Confidential." Based on this claim, confidential information should not be disclosed without prior approval from Monsanto.

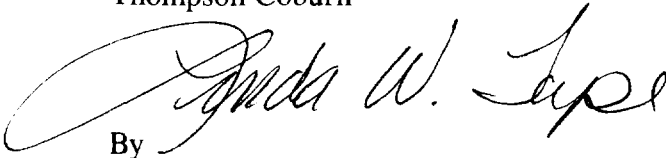
June 6, 1997

Page 2

If you have any questions regarding this matter, please contact me directly at the telephone number shown above.

Very truly yours,

Thompson Coburn

A handwritten signature in cursive script, appearing to read "Linda W. Tape". The signature is written in dark ink and is positioned to the right of the word "By".

By

Linda W. Tape

LWT/cn

cc: Mr. Mike Light
Mr. Brent Gilhousen

MONSANTO COMPANY'S RESPONSE TO
EPA SUPPLEMENTAL INFORMATION REQUESTS
FOR SAUGET AREA I AND II

OBJECTIONS

Monsanto Company ("Monsanto") generally objects to the overly-broad and unduly burdensome nature of the questions included in the May 7, 1997 Supplemental Information Requests propounded by the U.S. Environmental Protection Agency ("EPA") for the Sauget Area I and II sites located in Sauget, Illinois. In particular Monsanto objects to the instructions, definitions, and some of the questions included in this Information Request as exceeding the scope of EPA's authority for purposes of a Superfund site information request under 42 U.S.C. §9604(e). Monsanto objects to the overly broad scope of the questions and definitions included within EPA's request and to the unreasonable time period covered (dating back almost 80 years). Monsanto objects that EPA's information request contains undefined or improperly-defined terms, rendering the questions vague and ambiguous, overly-broad and unduly burdensome.

Monsanto further objects to the information requests to the extent they call for the disclosure or production of information protected from disclosure by the attorney-client privilege, the work product doctrine or other applicable privilege. Monsanto asserts a business confidentiality claim over some of the information submitted in this response pursuant to 42 U.S.A. §104(e)(7) and 40 C.F.R. §2.203. In each instance, every page of the material for which a claim of confidentiality is asserted is marked "Confidential." Any answers given in this document that are confidential will be labeled as such. Based on this claim, confidential information should not be disclosed without prior approval from Monsanto.

We note that much of the information provided in this response was found by Monsanto in the documents produced by Monsanto in the Cerro v. Monsanto lawsuit, which documents EPA reviewed within the last few years. Further, in the past, both the Illinois EPA and the U.S. EPA have requested information regarding the Sauget Sites from Monsanto. The present request is duplicative of many of those earlier requests. Monsanto objects to the government repeating requests and mandating that Monsanto search its document databases for a third time regarding these sites.

Monsanto's objections are continuing in nature, and apply to each and every Monsanto response to EPA's Information Request. Notwithstanding these objections, consistent with Monsanto's policy of cooperation with government agencies, Monsanto provides the responses as set forth below.

MONSANTO'S RESPONSES TO
EACH REQUEST

1. Identify all hazardous materials which ever were disposed of or may have been disposed of from the facilities at the sites as defined in Attachment 3. Include the nature of the material, the chemical content, the process for which the material was used or the process which generated the material, the disposal location and the time period of disposal.

Monsanto's Response:

As Monsanto has told EPA in response to other information requests on this same subject, operations at the Krummrich and Queeny plants began in the early 1900s. Thus, little, if any information exists on the wastes generated and disposed of prior to the 1970's. Further, much of the information that EPA seeks in this request, to the extent it exists, has been made available in the numerous documents that Monsanto has given to either U.S. EPA or the Illinois EPA regarding the Sauget Sites in past responses to information requests.

Despite the prior submissions, Monsanto will make the Standard Manufacturing Procedures ("SMPs") and Process Descriptions available for inspection again. These SMPs and Process Descriptions were made available to EPA in 1994-1995 in response to a prior information request, and EPA reviewed these documents. The documents contain confidential business information concerning the manufacturing processes at the Krummrich plant. Thus, Monsanto asks that the EPA treat them as such. If any copies are requested pursuant to EPA's inspection, Monsanto will take appropriate steps to insure that the documents are properly marked.

Additional documents responsive to this request are included in Exhibit 1 attached hereto. (Doc. # CER 042508-09; MCO 6178017-6178030; CER 013321-26)

Sources of information: Documents in Monsanto's possession.

2. Identify all persons who ever have arranged or may have arranged for disposal or arranged for transportation for disposal, of hazardous materials from the facilities to the sites.

Monsanto Response:

Much of the information that EPA seeks in this request is available in the numerous documents and information that Monsanto has given either the U.S. EPA or the Illinois EPA regarding the Sauget sites in past responses to information requests.

Up until the closure of the Krummrich landfill (Site R) and the Sauget landfill (Site Q), Monsanto likely used its own employees and its own trucks to transport waste materials from the Krummrich plant to disposal areas. Monsanto has been unable to identify the employees with the assignment to transport the wastes.

See Exhibit 2 attached hereto (Doc. # MCO 0616768-74), which was previously submitted to EPA. This is the "Eckhardt Survey" for the J.F. Queeny Plant which lists a number of historical haulers. Note that Exhibit 15 attached to the EPA 1997 Request, which is a document alleging statements by truck drivers for the JFQ plant, states that materials were hauled to either Site H or Site I prior to the Site R operation.

Source of Information: Documents in Monsanto's possession.

3. Has Monsanto ever used "GE supermix X-ray refresher" at the facilities? (See Attachment 7, photo numbers 17 and 18) If so,
- a. Identify the facilities in which it was used and the purpose for which it was used;
 - b. Provide the time frame during which Monsanto used the product;
 - c. list the constituents of this product; and
 - d. Identify how this product was disposed by the facilities; and
 - e. Identify the location of disposal areas for this product or containers for this product.

Monsanto Response:

Monsanto can find no indication that its facilities ever used GE Supermix x-ray refresher.

Source of Information: Document review; Robert J. Hiller, current Monsanto employee, Monsanto Company, W.G. Krummrich Plant, 500 Monsanto Avenue, Sauget, Illinois, 62206-1198; Robert L. Cheever, current Monsanto employee, Monsanto Company, J.F. Queeny Plant, 1700 South Second Street, St. Louis, Missouri, 63104

4. Has Monsanto ever used a pellet/bead-like material as a filter media or for any other use, which either was colored or became colored yellow, blue, tan or brown during use, and which may have been disposed of in the sites? (See Attachment 7, photo numbers: 11, 30, 31, 38, 46, 58, 63, and 64). If so,

- a. Identify the facility where the pellets were used and purpose of the use;
- b. Provide the time frame during which Monsanto used the material;
- c. List the constituents and possible contaminants contained in the material;
and
- d. Identify the locations of possible disposal at the sites.

Monsanto Response:

A material referred to as Molecular Sieve was used in the Chlorobenzene Department at Krummrich during the EPA stated time frame set out in paragraph 11 of the instructions attached to the 1997 Information Request. Molecular Sieve is a bead or pellet like material. It measures 1/32 inches in diameter and is an ivory color before use and turns to brown after use. The material is usually contaminated with monochlorobenzene or orthodichlorobenzene.

Monsanto has no knowledge of the disposal methods for the above listed materials other than what is listed in the SMPs for the chlor-alkali department and for the chlorobenzene department.

Monsanto has found no indication that it ever used a "pellet/bead-like material" at the Queeny plant.

Source of Information: Interview by Robert J. Hiller of various employees, Robert L. Cheever.

5. Has Monsanto ever used "Octylphenol", a Rohm Haas Company product? If so, please describe the purpose for which it was used, including the time frames in which it was used. (Attachment 7, photo 40).

Monsanto Response:

The uses of octylphenol are set out in Exhibit 3 attached hereto. Octylphenol is not a product of Monsanto's. Monsanto has no records indicating that it ever used octylphenol in its processes

Source of Information: Document review.

6. In its previous response, Monsanto references a Great Lakes Carbon Corporation product called "dicalite" (see Exhibits 11 and 13 and Attachment 8, photo numbers 65 & 66). Supply the following information about its use.

- a. Describe dicalite's purpose;
- b. Provide the time frame during which Monsanto used this product;
- c. List the constituents of this product; and
- d. Identify the locations of possible disposal at the sites.

Monsanto Response:

Dicalite was a widely used trademark name for inert filter aid materials made from diatomite or perlite (see discussion from the Condensed Chemical Dictionary, Ninth Edition, attached in Exhibit 4). Monsanto used this material in many departments at Krummrich (including 219/222 PN; 258 Santolube 203, 266 Santolube 393,493,60; 270 Santolube 290,801; and 275 Santolube 900, 907, PBSA, XRT-332a) as well as at Queeny (used in plasticizer and Santocizer 8 manufacturing). The photos (#65 & 66) appear to be the bags in which the material was received. It would have been the plant's practice to empty the Dicalite product into the equipment or tank, and then throw the empty bag into the trash.

- a) *The purpose of Dicalite (also referred to as filter aid) was to aid and improve various filtration steps in various chemical processes.*
- b) *The specific time period of use is unknown, but probably over an extended number of years. Note that the October 27, 1975 memo from Mr. Robert Harness, submitted in Monsanto's July 13, 1994 104(e) response, indicates that Dicalite was being used in 1975. Also note the documents in Exhibit 4 attached hereto indicate that the material was being used in 1968, 1971, 1974 and 1977.*
- c) *The general constituents of this material can be found in Exhibit 4 "diatomaceous earth" excerpt discussion from the Condensed Chemical Dictionary. Great Lakes Carbon Corporation should be able to provide the U.S. EPA a MSDS upon request.*
- d) *The documents in Exhibit 4 indicate disposal methods. Empty bags of the Dicalite material would likely have been disposed of in any landfill which the Monsanto WGK Plant used for trash.*

Source of Information: Document review, employee interviews by Robert J. Hiller, Robert L. Cheever.

7. Please identify the time periods during which the facilities in question produced pentachlorophenol and the locations at the sites where hazardous waste products or off-spec material was or may have been disposed, with particular attention to the time period prior to the opening of Site R in Area 2.

Monsanto Response:

From 1936 to 1938 the Queeny facility undertook a pilot project for PCP production. In October of 1938 the process was transferred to Krummrich where its production continued until 1978. Monsanto has no information other than what is set out in the PCP SMPs, which will be made available pursuant to Request #1, concerning the sites where hazardous waste products or off-spec material was or may have been disposed, particularly before the opening of Site R.

Source of Information: Document review.

8. Identify if Monsanto ever used the stencils shown in Attachment 7, photo numbers: 24-29, 67, 89 & 90. If so, describe the purpose (i.e., the object that would have been stenciled, etc.), and identify who transported the stencils and other solid waste to the site for disposal.

Monsanto Response:

The stencils in the pictures would have been paper trash. They were constantly being made, because each stencil could only be used a certain number of times before a fresh stencil was required. The stencils were used to place the names of products on the outside of product drums. New stencils would also be required each time a new lot was produced.

Source of Information: General Employee recollections.

9. Describe the duties and role of Department 246 at the Krummrich Plant.

Monsanto Response:

Department 246 was the aroclor production department at Krummrich. For a description of the process see the SMPs that will be made available pursuant to Request #1.

Source of Information: Document review.

10. Provide the name and address of the company who supplied sampling and laboratory glassware for the facilities.

Monsanto Response:

Krummrich plant purchased laboratory and sampling glassware primarily from Fisher Scientific. The Queeny plant purchased laboratory and sampling glassware primarily from Fisher Scientific and Northwestern Bottle.

Source of Information: Employee interviews by Robert J. Hiller, Robert L. Cheever.

11. Describe Monsanto's procedure/method for disposal of used or broken laboratory glassware from the facilities, including any chemical contents of the glassware.

Monsanto Response:

Monsanto has already sent to EPA information on this request. See the July 19, 1974 memo from J.F. Nemeth submitted in Monsanto's July 13, 1994 104(e) response.

Monsanto has learned the following more detailed information. At the Krummrich Plant, glassware that was to be discarded was rinsed and placed into a container that was located in the lab. That container was emptied periodically and either placed in a landfill or incinerated. Laboratory personnel would ensure that glassware was clean and free of chemical contamination before discarding. They did this by emptying the contents of the glassware then rinsing it. Depending on the material, the contents of the glassware were either sewered or placed in a 55 gallon drum that was specified for laboratory waste. Product samples were either returned to the department for recycling or placed into lab packs for disposal. If the sample was returned for recycling, the department would empty the contents of the sample jar into the process and place the empty jar into a 55 gallon drum. When the drum was full it was landfilled. After the landfill was closed, the drums were sent to a commercial incinerator.

A similar process was undertaken at Queeny with used glassware placed in 55 gallon open top steel drums. The glassware was broken to reduce volume. When full, the drums were sealed up and sent out for disposal with other plant waste.

Source of Information: Employee interviews by Robert J. Hiller, Robert L. Cheever.

12. Explain how Monsanto disposed of off-specification material and other material (hazardous or non-hazardous) from the facilities prior to the opening of "Site R" in the Sauget Area 2 Site in 1957, including those chemicals listed in exhibits 2 and 3.

Monsanto Response:

This request seeks information from over forty years ago. Monsanto has already given EPA available information relating to this request in past responses to government requests.

Information relating to this request can be found in SMPs that will be made available pursuant to Request # 1 herein

Source of Information: Document review.

13. Explain how Monsanto disposed of off-specification material and hazardous and non-hazardous plant wastes from the facilities after "Site R" closed in 1978, including those chemicals listed in exhibits 2 and 3.

Monsanto Response:

Documents already in EPA's possession show that after Site R closed, Monsanto sent its hazardous waste to permitted hazardous waste disposal facilities outside St. Clair County. Non-hazardous waste went to non-Sauget landfills

Source of Information: Document review.

14. Describe the chemical components and uses of the Monsanto product "Santomerse No. 1." (See Attachment 7, photo numbers 21, 22, and 23).

Monsanto Response:

Santomerse No. 1 is an alkylaryl sulfonate. It is a surface active agent. It's production was discontinued in 1966. See Exhibit 5 attached hereto.

Source of Information: Document review.

15. Describe the contents of Monsanto's Krummrich Plant liquid waste stream prior to 1989, with particular attention to the Krummrich Plant's method of disposal of liquid plant wastes prior to the Village of Monsanto's installation of the sanitary sewer system.

Monsanto Response:

Much of the information that EPA seeks in this request is available in the numerous documents and information that Monsanto has given to either EPA or the Illinois EPA regarding the Sauget Sites in past responses to information requests.

Monsanto has no information on how the industrial effluent was disposed of prior to the Village of Monsanto's installation of the sanitary sewer in 1933. After 1933, all effluent from the plant flowed into the village sewer system. The content of liquid waste streams for each department can be found in the SMPs (see response to Request 1 herein.)

Source of Information: Document review.

16. Identify Monsanto's "permitted agents" who were responsible for transporting waste to Monsanto's landfill (Site R). Were any of the agents involved in the disposal of chemical wastes generated at the facilities prior to the opening of Site R?

Monsanto Response:

This request is duplicative in that it seeks the same information as in Request #2 herein. Therefore, see Monsanto's response to Request # 2.

17. What procedure did the above mentioned agents follow in disposing of hazardous waste? Include any documentation that was required.

Monsanto Response:

Monsanto has no information relating to this request other than what is set out in Exhibits 1,5,7,8, & 9 attached to EPA's 1997 Information Request.

Source of Information: Document review.

18. With reference to exhibits 6 and 7, identify or provide the following:
- a. The circumstances surrounding Monsanto's decision to include an additional provision in its agreement with Sauget forbidding scavenging;
 - b. Any information, employee interviews or otherwise that Monsanto has regarding Sauget and Company's (a.k.a. Industrial Salvage and Disposal) scavenging activities; and
 - c. Any information Monsanto has regarding Sauget and Company's (or Industrial Salvage and Disposal's) drum removal.

Monsanto's Response:

To date, Monsanto has found no additional information other than what is set out in the exhibits attached to EPA's request.

Source of Information: Document review.

19. What was the process for deciding, and who decided, what materials should be disposed of in Site Q and Site R of Sauget Area ? If a determination of "hazardous" vs "non-hazardous" materials was part of that process, how was the determination made?

Monsanto Response:

Plant process and chemical waste went to Site R. In general, trash (such as, paper, empty drums, etc.) and various, innocuous plant residues went to Site Q. The various plant environmental department employees had input over what materials went to Site Q.

Source of Information: Document review, Steve Smith, current Monsanto employee, Monsanto Co., 800 N. Lindbergh, G4WM, St. Louis, Missouri, 63167

20. Explain exhibit 4, specifically, give site location for each landfill this document references; and further explain violations #3 and #5 located on page 2 of the exhibit.

Monsanto Response:

The information in EPA Exhibit 4 speaks for itself. The statement in Exhibit 4 "Solid waste and trash hauled to the Sauget Village sanitary landfill" refers to Site Q. In Exhibit 4, the statement "(2) Liquid chemical waste hauled to the Monsanto sanitary landfill" refers to Site R. This exhibit quotes a number of alleged violations concerning Site Q, made by an IEPA inspector. Monsanto is not able to provide any further explanation of IEPA's observations #3 or #5 at this time.

21. Provide the chemical characteristics of P2S5 and explain the location of "outside of the fenced area" as exhibit 8 instructs.

Monsanto Response:

The chemical characteristics of P2S5 can be found in the MSDS attached in Exhibit 6 hereto.

The area outside the fenced area presumably was on landfill R but was not within the fence.

Source of Information: Document review.

22. Provide any results or documents from tests outlined in exhibit 9.

Monsanto Response:

See documents in Exhibit 7 attached hereto.

Source of Information: Document review

23. Identify which Site (i.e. site R, Site G, etc.) "Sauget landfill" references in exhibit 12?

Monsanto Response:

Monsanto believes that the reference to the "Sauget Landfill" in Exhibit 12 attached to EPA's 1997 Information Request is a reference to Site R. This Exhibit indicates that Monsanto was undertaking steps to determine which chemicals were non-hazardous prior to landfilling.

Source of Information: Steve Smith; Mike Light, current Monsanto employee, Monsanto Co., 800 N. Lindbergh, F2EA, St. Louis, Missouri, 63167.

24. Provide further explanation of exhibit 15, specifically, discuss what facility the exhibit references; and explain what landfilling operations Monsanto was extending.

Monsanto Response:

Exhibit 15 attached to EPA's 1997 Information Request references the J.F. Queeny plant.

It is unclear what EPA means when it states "explain what landfilling operations Monsanto was extending." Exhibit 15 merely references who was hauling JFQ wastes to what locations.

Source of Information: Exhibit 15.

25. Define the composition of major PCB products produced by Monsanto in terms of the relative concentrations of Arochlors.

Monsanto Response:

The SMPs and Process Descriptions that will be made available pursuant to Request #1 identify the PCB products manufactured by Monsanto.

26. Did Monsanto sell drummed PCBs to customers in the Sauget/Cahokia area?

Monsanto Response:

Yes.

Source of Information: General company knowledge.

27. Did Monsanto sell bagged PCBs to customers in the Sauget/Cahokia area?

Monsanto Response:

The Krummrich plant did not produce PCBs in a dry form for packaging and sale in bags. On a limited basis, Monsanto's Anniston, Alabama plant sold PCBs in bags, which material had a high chlorine content. These were in a solid form and used as flame retardants in plastics.

Source of Information: William Papageorge, 321 Pebble Valley Dr., St. Louis, Missouri, 63141; retired Monsanto employee.

28. Did Monsanto sell unmarked drums or bags containing PCBs to customers in the Sauget/Cahokia area?

Monsanto Response:

No unmarked PCBs would have been sold by Monsanto. It was not its practice.

Source of Information: William Papageorge

29. Did Monsanto produce a PCB product sold to General Electric as "pyronal"?

Monsanto Response:

Monsanto sold a PCB product to general Electric called Pyranol. General Electric sold a trademarked material called Pyronal.

Source of Information: Document review

30. Is Monsanto the only producer of PCBs in the United States? If not, identify other producers.

Monsanto Response:

The overwhelming majority of the PCBs were produced and sold in the USA by Monsanto. There was some indication in the 1970s that other companies, on occasion, made PCBs but this information was not confirmed. Monsanto heard that Dow tried to manufacture and market PCBs, but struck out in the market place. Monsanto also heard that Coastal Chemical made some PCBs for sale to off shore drilling rigs. Finally, some PCBs from Europe came in as chemicals marketed as "Not Otherwise Indicated".

Source of Information: William Papageorge

31. What other chlorinated hydrocarbons besides PCBs did Monsanto produce at the facilities?

Monsanto Response:

The SMPs that Monsanto will make available to EPA pursuant to Request #1 will answer this request. Among the chlorinated hydrocarbons produced at the facilities were: chlorobenzenes, benzyl chloride, Santobane, and trichlorobenzyl chloride

Source of Information: Dr. Henry C. Godt, Jr., 12410 Ballas Meadows Drive, St. Louis, Missouri, 63131; Document reviews.

32.

LEAH

Identify all of the materials used in large quantities in Monsanto's manufacture of chlorinated hydrocarbons at the facilities, including catalysts.

Monsanto Response:

Monsanto objects to this request because of the vagueness of the term "large quantities." Despite the vagueness, information concerning the materials used in the manufacture of chlorinated hydrocarbons can be found in the SMPs and process descriptions that Monsanto will make available to EPA pursuant to Request #1. Some of the materials used were as follows:

Aroclor products: biphenyl, Santowax C, Santowax R, chlorine, ferric chloride, hydrated lime, Attapulugus Earth, and Porocel.

Chlorobenzenes: benzene, chlorine, and ferric chloride or ferric chloride-sulfur.

Benzyl chloride: toluene, chlorine, and lime slurry.

Santobane: ~~monochlorobenzene~~, chloral, chlorine, ethanol, ferric chloride, sodium bicarbonate, sulfuric acid, oleum, hydrated lime, quick lime, and filter aid.

Trichlorobenzyl chloride: Trichlorotoluene, chlorine, ferric chloride, lime slurry and carbon dioxide.

All the above information is considered highly confidential.

Source of Information: Dr. Henry Godt, Jr.

33. Where did Monsanto dispose of unreacted biphenyl, sludges, tank bottoms, distillate, and off-specification chlorinated hydrocarbons, especially prior to the opening of Site R?

Monsanto Response:

The SMPs that Monsanto will make available to EPA pursuant to Request #1 will answer this request.

34. Identify Monsanto's customers for chlorinated hydrocarbons in the Sauget/Cahokia area.

Monsanto Response:

Monsanto objects to this request because it seeks highly confidential information concerning customers. To the extent Monsanto can find information on its chlorinated hydrocarbon customers in the Sauget/Cahokia area for the 1950-1985 time frame, it will make the information available for EPA review at the same time as the information is made available pursuant to Request #1.

35. How, when, and by whom was the Dead Creek culvert obstructed at Judith Lane?

Monsanto Response:

Monsanto has found no further information other than what is identified in EPA Information Request Exhibit 16

Source of Information: Document review.

36. On what basis was the material on Exhibit 15 redacted? This material was not redacted at the time the material was previously produced for IEPA and U.S. EPA. Provide an unredacted copy.

Monsanto Response:

Monsanto does not know who redacted Exhibit 15. Monsanto has not been able to find an unredacted copy. Based on EPA's request, the government may have information on the location of an unredacted copy in its possession

Source of Information: Document review.

37. Exhibit 16 indicates that in the 1920's, liquid wastes flowed to Dead Creek, and that in the early 1930's, overflow from the WGK went to Dead Creek. Indicate what products were being produced at the Krummrich facility during the 1920's and 1930's and what process wastes may have flowed to Dead Creek.

Monsanto Response:

*The SMPs which will be made available for inspection pursuant to Request #1 identify what products were produced at the Krummrich facility. The time periods of when products were produced can be found in Monsanto's 10/94 response to EPA's requests. Materials produced may have included: aroclor products, chlorosulfonic acid, monchlorobenzene, *o*-dichlorobenzene, *p*-dichlorobenzene, *o*-nitrochlorobenzene, *p*-nitrochlorobenzene, chlorine, sodium hydroxide, hydrogen, dinitrochlorobenzene, *o*-nitroaniline, *p*-nitroaniline, *p*-phenetidine, pentachlorophenol, sodium pentachlorophenate, *o*-chlorophenol, *p*-chlorophenol, phosphorus trichloride, phosphorus oxychloride, tributyl phosphate, tricresyl phosphate, triphenyl phosphate, phenol, Santosite, sodium phenate, sulfuric acid, oleum, sulfur trioxide, hydrochloric acid, and *p*-aminobiphenyl.*

Monsanto has no information other than what is set out in EPA Exhibit 16 that indicates that process wastes flowed from the Krummrich facility into Dead Creek. Monsanto has been unable to determine if the information in Exhibit 16 is accurate.

Source of Information: Dr. Henry Godt, Jr., document review

38. Exhibits 16 and 17 indicate that in 1935, Dead Creek was dredged. Where was this dredge material disposed?

Monsanto Response:

Monsanto has no direct knowledge to answer this question. Attached in Exhibit 8 are transcript pages from Sandy Silverstein's deposition in the Cerro v. Monsanto case which reference the dredging incidents.

Source of Information: Cerro v. Monsanto

39. Supply a readable copy of Exhibit 16, especially the paragraph concerning Waggoner Trucking at the bottom of the last page.

Monsanto Response:

Monsanto has not found a copy of this document that is any clearer than the one in EPA's possession.

Source of Information: Document review.

40. Exhibit 17 (p. 2) indicates that after the installation of the Village of Sauget sewer system in 1933, storm water runoff on occasion washed throughout the area, and could have flowed toward the Creek. What did that storm water runoff contain?

Monsanto Response:

To Monsanto's knowledge, no testing nor analysis was ever done of the storm water runoff. Thus, Monsanto does not know what the storm water contained.

Source of Information: Document review.

41. Exhibit 17 (p. 2) indicates that from 1917 to the 1930's, the Krummrich plant disposed of its wastes in "a commercial landfill operated by Leo Sauget in the area around the Sauget Village Hall near Queeny and Nickel Avenues." Identify this landfill by Site letter and identify the composition of those wastes.

Monsanto Response:

Monsanto has found no more information on the quoted statement that is set out in Exhibit 17. There was apparently a landfill operated near Sauget Village Hall, Queeny Ave. and Nickel Avenues. Based on this information, Monsanto's belief is that

the site may be Site I or Site H. What was disposed at the referenced site and whether the statement is accurate can not be determined.

Source of Information: Document review.

42. Identify the exact location of the "landfill west of Highway 3" which is cited at the top of page of Exhibit 17.

Monsanto Response:

Monsanto believes that this is probably Site R but has been unable to confirm this.

Source of Information: Document review.

43. Identify by Site letter and locations the identity of the landfill to which Exhibit 18 refers.

Monsanto Response:

Monsanto believes this could be site I or H.

Source of Information: Document review.

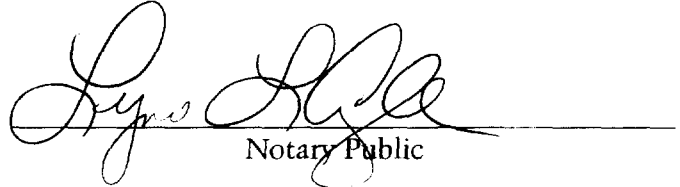
VERIFICATION

STATE OF MISSOURI)
)
COUNTY OF ST. LOUIS)

I, D. M. LEIGHT, being duly sworn, depose and state that I, a Monsanto employee responsible for responding to the EPA's Request for Information regarding the Sauget Sites, have read the foregoing Monsanto Company's Response to Request for Information for the Sauget Sites, and am familiar with the contents thereof; that the document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



SWORN AND SUBSCRIBED to before me on this 6th day of June, 1997.


Notary Public

(SEAL)

My Commission Expires:

LYNNE L. ANGLE
NOTARY PUBLIC STATE OF MISSOURI
JEFFERSON COUNTY
MY COMMISSION EXP. OCT. 18, 1997

Parts 1 & 2, 4-8 in CBI
in Records Center

The
Condensed Chemical
Dictionary

NINTH EDITION

Revised by

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Coeditor, Encyclopedia of Chemistry
Coauthor, Glossary of Chemical Terms



VAN NOSTRAND REINHOLD COMPANY

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caprylic acid
perfume; F.C.C.

organic synthesis; sol-boiling esters; antifoam-

nol; methyl hexyl carbi-
Frequently called cap-

liquid; refractive; aromatic
ether; slightly soluble
C; b.p. 178-179°C; f.p.
-37 (20°C). Flash point
vicity.
sum ricinoleate with an

ure.
tank cars.
of plasticizers, wetting
s. hydraulic oils, petro-
intermediates; masking of

and 2-ethylhexaldehyde.

liquid; amine odor; boiling
779 (20, 20°C); refractive
index 1.407. Low toxicity.

$(\text{CH}_3)_2\text{NH}$.
amine odor; b.p. 137-
138°C; refractive index 1.423
(o.c.); insoluble in water;
solvents, especially pe-

s.
rate fire risk. Skin irri-
ber accelerators, insecti-
pharmaceuticals.

oximide (N-(2-ethylhexyl)-
dicarboximide)

°C (2 mm); sp. gr. 1.05
1.505 (n 20/D). Miscible
and oils. Combustible.
anhydride, cyclopentadiene

synergist.

imide; caprylic bromide)

. Miscible with alcohol,
ter. Sp. gr. 1.118 (15°C);
refractive index 1.4503

ammonium compounds,
lizers.

phenol.

H_2Cl .
soluble in most organic
15.5°C; refractive index
20°C; b.p. 181.6°C; flash

ns; tank cars.
manufacture of organo-

n-octyl n-decyl adipate (NODA).

Properties: Liquid, mild odor; sp. gr. 0.92-0.98 (20/
20°C); f.p. -50°C; boiling range 220-254°C (4 mm);
refractive index 1.447. Combustible.

Containers: 5-gal cans; 55-gal drums; tank cars.

Use: Low-temperature plasticizer.

n-octyl-decyl alcohol. A blend of alcohols. Combustible. Available in tank cars and trucks. Used as intermediate for plasticizers.

n-octyl n-decyl phthalate.

Properties: Clear liquid; mild characteristic odor. Sp. gr. 0.972-0.976 (20, 20°C); f.p. -40°C; boiling range 232-267°C (4 mm); refractive index 1.482 (25°C). Flash point 455°F. Combustible.

Containers: 55-gal drums; tank cars and trucks.

Uses: Plasticizer for vinyl resins.

octylene. See octene.

octylene glycol titanate.

Properties: Light-yellow solid.

Derivation: Reaction of butyl titanate with octylene glycol.

Uses: Cross-linking agent; surface-active agent.

See also titanium chelate.

oxylene oxide Mixed $\text{CH}_3(\text{CH}_2)_7\text{CHCH}_2\text{O}$ and

$\text{CH}_3(\text{CH}_2)_7\text{CHCH}(\text{CH}_2)_7\text{O}$. Sp. gr. of liq. 0.830 (25°C). Combustible.

Uses: Organic intermediate; epoxy resins.

octyl formate $\text{C}_8\text{H}_{17}\text{OOCH}$.

Properties: Colorless liquid; fruity odor. Soluble in mineral oil; practically insoluble in glycerin. One ml dissolves in 5 ml of 70% alcohol; sp. gr. 0.869-0.872 (25°C); refractive index 1.4180-1.4200 (20°C). Combustible.

Grade: F.C.C.

Use: Flavoring agent.

octylic acid. See caprylic acid.

2-octyl iodide (caprylic iodide; secondary normal capryl iodide) $\text{CH}_3(\text{CH}_2)_7\text{CHICH}_2$.

Properties: Oily liquid. Sp. gr. 1.318 (18°C); b.p. (approx) 210°C (dec).

Hazard: Moderately toxic by ingestion and inhalation. Keep away from light and air.

Use: Organic synthesis.

octylmagnesium chloride $\text{C}_8\text{H}_{17}\text{MgCl}$. A Grignard reagent available in tetrahydrofuran solution.

Containers: Up to 55-gal drums.

n-octyl mercaptan $\text{C}_8\text{H}_{17}\text{SH}$.

Properties: Water-white liquid with mild odor; b.p. 199°C; sp. gr. 0.8395 (25.4°C); refractive index 1.4497 (25°C); flash point 115°F (o.c.). Combustible.

Hazard: Moderate fire risk. Probably toxic.

Uses: Polymerization conditioner; synthesis.

tert-octyl mercaptan $\text{C}_8\text{H}_{17}\text{SH}$.

Properties: Colorless liquid. Boiling range 154-166°C; sp. gr. 0.848 (60-60°F); refractive index 1.454 (n 20/D); flash point 105°F. Combustible.

Grade: 95%

Containers: Drums; tank cars.

Hazard: Moderate fire risk. Probably toxic.

Uses: Polymer modification; lubricant additive.

n-octyl methacrylate $\text{H}_2\text{C}=\text{C}(\text{CH}_3)\text{COOC}_8\text{H}_{17}$.

Properties: Water-insoluble colorless liquid; polymerizes to a resin if unstabilized.

octyl peroxide (caprylyl peroxide).

Properties: Straw-colored liquid with sharp odor. Immiscible with water.

Hazard: Dangerous fire risk. Strong oxidizing agent.

Shipping regulations: (Solution) (Rail) Yellow label.

(Air) Organic Peroxide label. Legal label name: caprylyl peroxide.

octyl phenol (diisobutyl phenol) $\text{C}_8\text{H}_{17}\text{C}_6\text{H}_4\text{OH}$. Probably a mixture of isomers.

Properties: White flakes; congeals 72-74°C; sp. gr. 0.89 (90°C); b.p. 280-302°C; hydroxyl coefficient 259-275. Insoluble in hot and cold water. Limited solubility in alkalis. Soluble in 1:1 mixture of methanol and 50% aqueous potassium hydroxide, also in alcohol, acetone, fixed oils. Available commercially as a liquid. Combustible.

Derivation: (p-tert-isomer): Catalytic alkylation of phenol with olefins.

Containers: Bags; drums; carloads; tank cars.

Use: Nonionic surfactants; plasticizers; antioxidants; fuel oil stabilizer; intermediate for resins, fungicides, bactericides, dyestuffs, adhesives, rubber chemicals.

para-tert-octylphenoxy polyethoxyethanol

$(\text{CH}_3)_2\text{CCH}_2\text{C}(\text{CH}_3)_2\text{C}_6\text{H}_4\text{O}(\text{CH}_2\text{CH}_2\text{O})_x\text{H}$. Anhydrous liquid mixture of mono-para-(1,1,3,3-tetramethylbutyl)phenyl esters of polyethylene glycols in which x varies from 5 to 15.

Properties: Yellow, viscous liquid; faint odor; bitter taste, sp. gr. 1.060; refractive index 1.489 (25°C); soluble in water, alcohol, acetone, benzene, toluene; insoluble in hexane; pH is between 7 and 9. Combustible.

Grade: N.F.

Uses: Food packaging, probably as a plasticizer for films.

para-octylphenyl salicylate $\text{C}_8\text{H}_{17}\text{OHCOOC}_6\text{H}_4\text{C}_6\text{H}_5$.

Properties: White solid; m.p. 72-74°C; density 5.6 lb./gal (20°C). Soluble in hexane, benzene, acetone and ethanol. Insoluble in water.

Use: Prevents photooxidation in polyethylene and polypropylene.

octyl phosphate. See trioctyl phosphate.

n-octyl sulfoxide isosafrole. See sulfoxide.

octyl trichlorosilane (trichlorooctylsilane) $\text{C}_8\text{H}_{17}\text{SiCl}_3$.

Properties: Water-white liquid with pungent irritating odor. Fumes readily in moist air to evolve corrosive vapors.

Hazard: Highly toxic by ingestion and inhalation; strong irritant to skin and mucous membranes. Moderate fire risk in contact with oxidizing materials.

Use: Intermediate silicones.

Shipping regulations: (Rail) White label. (Air) Corrosive label. Not accepted on passenger planes.

"Odamask."³⁴² Trademark for deodorizing and reodorizing aromatics for industrial use.

ODPN. Abbreviation for beta, beta'-oxydipropionitrile.

odor. An important property of many substances, manifested by a physiological sensation due to con-

Superior numbers refer to Manufacturers of Trade Mark Products. For page number see Contents.

Exhibit 3.0

**CONFIDENTIAL BUSINESS
INFORMATION**

Pursuant to 40 CFR Part 2, Subpart B, Monsanto Company hereby asserts a business confidentiality claim covering this Exhibit and all documents attached thereto.

Monsanto Company, No. 82-CH-195, 20th Judicial Circuit, St. Clair County, Illinois; Cerro Copper Products Company v. Monsanto Company and Monsanto Chemical Company, No. 92-CV-204-WDS, (U.S.D.C. SD IL); and, Monsanto Company v. Aetna Casualty and Surety Company, et al., C.A. No. 88C-JA-118-1-CV, Superior Court, New Castle County, Delaware), various communications and documents are not subject to disclosure on the basis of irrelevance, overbroadness, lack of competent authority, attorney-client communications, attorney work product, self-critical analysis and/or settlement negotiations.

Monsanto states that the objections set forth above are continuing in nature and, to the extent applicable, shall be deemed included in every Monsanto answer below, whether or not specifically set forth. Monsanto does not waive the right to raise additional objections as appropriate at a later time.

RESPONSES

1. Identify all persons consulted in the preparation of the answers to these Information Requests.

RESPONSE: Monsanto consulted with a number of individuals/entities in the preparation of the factual answers to these Information Requests. Certain consultations are privileged as attorney work product and attorney-client communications as Monsanto attorneys, outside counsel and their staffs were utilized to develop

To the extent that the individuals named above are Monsanto employees, any contacts with them must be arranged through Stephen P. Krchma, Environmental Counsel, Monsanto Company, 800 N. Lindbergh Blvd., St. Louis, MO 63167, 314/694-1278.

2. Identify all documents consulted, examined, or referred to in the preparation of the answers to these Requests, and provide copies of all such documents, clearly indicating on each document the questions to which it is responsive.

RESPONSE: Voluminous documentation was reviewed in order to fully identify sources of information for answers to these requests. Such documents include, but were not limited to, information already available to EPA:

- a. Monsanto's prior responses, dated October 24, 1989, to Illinois Environmental Protection Agency (IEPA) Request for Information, L1630200005--St. Clair County, Sauget Sites--Areas I and II; and dated July 2, 1987 to EPA Request for Information on Dead Creek--Area G, Sauget Site, Sauget, Illinois.
- b. Documents previously produced to the State of Illinois in Illinois v. Monsanto, Docket No. 82-CH-195, Circuit Court for the 20th Judicial District, St. Clair County, Illinois.

Information Request or who may be able to provide additional responsive documents, identify such persons and where they can be contacted.

RESPONSE: To the extent that other persons may be able to provide a more detailed or complete response to a particular Information Request or may be able to provide additional responsive documents, such persons are identified in the documents which are provided/referenced herein.

4. List the EPA Identification Numbers of the Respondent.

RESPONSE: Monsanto has EPA Identification Numbers for many of its facilities throughout the nation, which facilities have no relationship to the Sauget Area 1 Site and are, therefore, irrelevant. The EPA Identification Number of the Krummrich plant is ILD000802702. The EPA Identification Number for the Queeny plant is MOD004954111.

5. Identify all persons having knowledge or information about the generation, transportation, treatment, disposal or other handling of material at the Site or at the facilities, particularly those who worked for Monsanto during the period prior to 1967.

Sauget Area I Site, any such information is provided in Monsanto's "Response to Request for Information Concerning Sauget Area I, Sauget, Illinois" (Responses) below and the documents as provided/referenced herein.

7. Identify all persons, including yourself, who have arranged or may have arranged for disposal or treatment, or arranged for transportation for disposal or treatment, of hazardous materials ("materials") at or to the Site, with particular attention to persons who performed these duties prior to 1967. In addition, identify the following:
 - a. The persons with whom you or such other person(s) made such arrangements;
 - b. Each date on which such arrangements took place;
 - c. For each transaction, the nature of the material, including the chemical content, characteristics, physical state (e.g., solid, liquid), and the process for which the material was used or the process which generated the material;
 - d. The owner of the materials so accepted or transported;

- m. The measures taken by you to determine the actual methods, means, and site of treatment or disposal of the materials involved in each transaction;
- n. The type and number of containers in which the materials were contained when they were accepted for transport, and subsequently until they were deposited at the Site, and all markings on such containers;
- o. The price paid for (i) transport, (ii) disposal, or (iii) both of each hazardous material;
- p. Copies of all documents containing information responsive to a - o above;
- q. All persons with knowledge, information, or documents responsive to a - p above.

RESPONSE: Monsanto is not presently aware of sources of information which provide the amount of detail sought in Request No. 7 for transactions from 25 to 90 years ago. Those sources which may have any knowledge or information are identified in the Responses and documents as provided/ referenced therein.

- 8. Provide a detailed listing of products, including by-products, manufactured or produced at the facilities for the

1917. However, to the extent that such information is readily available, it is provided in Exhibit 3.2.

10. Identify the raw chemical products received (e.g., benzene, chlorine, acids, etc.) at each of the facilities and the additives and catalysts used to produce finished products.

RESPONSE: Monsanto objects that this Request is irrelevant, overbroad and without competent authority as it seeks information concerning eight decades of manufacturing operations back to 1900 without any reference to treatment or disposal of hazardous substances in the Sauget Area I Site. Monsanto did not even own the Krummrich plant until 1917. However, to the extent that such information is readily available, it is provided in Exhibit 3.2.

11. The Krummrich facility evidently began operations at its present location in the early 1900's. Provide all information relating to the processes used at the Commercial Acid Works or the Indianahoma Oil Refinery. Identify all documents concerning the wastes generated at these two plants prior to Monsanto's use of the property.

RESPONSE: Monsanto objects that this Request is irrelevant, overbroad and without competent authority as it seeks information concerning eight decades of manufacturing

or disposal of hazardous substances in the Sauget Area I Site. Monsanto did not even own the Krummrich plant until 1917. However, to the extent that such information is readily available, it is provided in Exhibit 3.2.

13. Were off-specification products treated as wastes at the facilities? Provide information and documents concerning Monsanto's treatment and disposal practice or policy concerning off-specification products.

RESPONSE: Monsanto objects that this Request is irrelevant, overbroad and without competent authority as it seeks information concerning eight decades of manufacturing operations back to 1900 without any reference to treatment or disposal of hazardous substances in the Sauget Area I Site. Monsanto did not even own the Krummrich plant until 1917. However, to the extent that such information is readily available, it is provided in Exhibit 3.2.

14. It has been estimated that 70% of Monsanto's hazardous waste is sold as by-products to other firms. Describe Monsanto's practice of selling by-products to other companies or transferring by-products to other Monsanto plants.

RESPONSE: Monsanto objects that this Request is irrelevant, overbroad and without competent authority as it seeks

16. As the Krummrich and Queeny facilities evolved over the years, how has the disposal of obsolete process equipment been handled? Describe the disposition of such equipment.

RESPONSE: Monsanto objects that this Request is irrelevant, overbroad and without competent authority as it seeks information concerning eight decades of manufacturing operations back to 1900 without any reference to treatment or disposal of hazardous substances in the Sauget Area I Site. Monsanto did not even own the Krummrich plant until 1917. However, to the extent that such information is readily available, it is provided in Exhibit 3.2.

17. Describe the methods used to handle contaminated soil, contaminated clothing/protective gear, and laboratory wastes at the facilities. Were these items commingled with undefined hazardous or non-hazardous materials before disposal?

RESPONSE: Monsanto objects that this Request is irrelevant, overbroad and without competent authority as it seeks information concerning eight decades of manufacturing operations back to 1900 without any reference to treatment or disposal of hazardous substances in the Sauget Area I Site. Monsanto did not even own the Krummrich plant until 1917. However, to the extent that such information is readily available, it is provided in Exhibit 3.2.

RESPONSE: Monsanto objects that this is a request for admission, not information. Monsanto's agreement or disagreement is a matter of legal conclusions and/or argument. As such, this Request does not seek information which EPA is authorized to obtain pursuant to Section 104(e) of CERCLA. Information pertinent to this Request is supplied in Responses to the other Requests herein and in the documents as provided/referenced.

20. Does Monsanto disagree with the contention that at least a portion of the chlorobenzenes, chlorophenols, chloroanilines, nitrophenols, nitroanilines and/or PCBs which have been found to exist in Sauget Area I sites was used, or generated at its Queeny or Krummrich facility? If Monsanto so disagrees, provide all information and documentation which supports this position.

RESPONSE: Monsanto objects that this is a request for admission, not information. Monsanto's agreement or disagreement is a matter of legal conclusions and/or argument. As such, this Request does not seek information which EPA is authorized to obtain pursuant to Section 104(e) of CERCLA. Information pertinent to this Request is supplied in Responses to the other Requests herein and in the documents as provided/referenced.

- c. Was it Monsanto's practice or policy to dictate or choose where these materials would be disposed of or did Monsanto leave the disposal of the materials up to its waste disposal contractors?

RESPONSE: Information concerning waste disposal contractors is contained in Exhibit 3.3 and documents as otherwise referenced/provided herein.

23. Did Monsanto or any of its consultants, agents, or contractors at any time secure the services of Leo Sauget or his company (later named "Industrial Salvage & Disposal, Inc.") to process, accumulate, treat, remove, haul or dispose of any hazardous materials and/or fly ash Monsanto generated or used at either the Queeny or Krummrich facilities? If so, describe the nature of these services, when they were rendered, and all contracts or agreements associated with these service. In particular, describe the arrangement with this company regarding where these materials and/or fly ash were to be disposed of.

RESPONSE: Information concerning waste disposal contractors is contained in Exhibit 3.3 and documents as otherwise referenced/provided herein.

RESPONSE: Monsanto has not located any information as to the U.S. Chemical Warfare Plant other than referenced above in the Response to Request No. 8. See Exhibit 3.2.

27. Did Monsanto or any of its consultants, agents, or contractors at any time secure the services of Harold Waggoner or Waggoner & Company to process, treat, accumulation, move, haul, or dispose of hazardous materials and/or fly ash generated or used at the facilities? If so, describe the nature of these services and all contracts or agreements associated with these services. Also describe the arrangement with this company regarding where these materials and/or fly ash were to be disposed of.

RESPONSE: Information concerning waste disposal contractors is contained in Exhibit 3.3 and documents as otherwise referenced/provided herein.

28. Identify any and all trucking firms or disposal contractors hauling Monsanto chemicals, chemical wastes, by-products or off-specification products that have used any services of Harold Waggoner or Waggoner & Company, Leo Sauget, Paul Sauget, Industrial Waste Salvage Inc., or Sauget & Company. Provide all contracts or arrangements associated with these services.

these wastewaters went during and after bypass events. When was this bypass point closed and what prompted its closure?

RESPONSE: Information as to the methods used at the Krummrich plant for handling process wastewater and sanitary discharges both prior to and after the plant's connection to the Village of Sauget sewer system in about 1933 are described in Exhibit 3.4 and documents as otherwise referenced/provided herein.

31. Provide the construction of the Village of Sauget's (then the Village of Monsanto's) sewer system, did Monsanto (and/or other industries in the Village) ever, whether intentionally or by accident, spill or discharge process wastewaters, sanitary discharges and/or liquid chemical wastes directly into Dead Creek? Describe these spills or discharges.

RESPONSE: Information as to the methods used at the Krummrich plant for handling process wastewater and sanitary discharges both prior to and after the plant's connection to the Village of Sauget sewer system in about 1933 are described in Exhibit 3.4 and documents as otherwise referenced/provided herein.

available to the EPA. Subject to the foregoing objections, Monsanto was unable to locate any information relating to a civil lawsuit, as described.

35. How did Monsanto handle, treat, and dispose of bottom ash and fly ash wastes generated from its power plant(s) at the Queeny and Krummrich facilities? Does Monsanto have any knowledge that these materials were or could have been used for cover material at Sites G, H, I and/or L in Sauget Area I? If so, describe how these materials were used for this purpose.

RESPONSE: Monsanto managed materials generated from its power plants over the decades of operation in a number of ways, many of which are irrelevant to the Sauget Area I Site. Monsanto cannot speculate as to whether the material could have been used for cover materials at Sites G, H, I and/or L in the Sauget Area I Site. To the extent that Monsanto has information concerning use of such materials by Leo Sauget or entities related thereto, such information is provided in Exhibits 3.3 and 3.5.

- 36A. [NOTE: The EPA requests contain two different requests, both marked as "36". For purposes of clarity, they will be referred to as "36A" and "36B".] In the RCRA Section 103(c) "Notification of Hazardous Waste Site" form completed for

solvents? Provide all documents and information which relate to this reported information, as well as all information which describes in greater detail the types and characteristics of the wastes contained in these drums.

- g. Provide all documents which pertain to or provide information regarding which landfill or landfills were used to accept the drums referenced in the Notification form, as well as the volume and types of hazardous wastes contained in the drums.
- h. What is the basis for stating that the use of the landfill referenced in the Notification form stopped in 1957?
- i. What is the basis for the Monsanto plant manager signing the Notification form as a "Transporter." Identify all other persons or companies which were involved in the transportation of the hazardous wastes identified in the Notification.

RESPONSE:

- a. The precise location(s) of the landfill(s) referenced in this Notification are not known. It is believed that the company which provided the disposal service had its offices located on Falling Springs Road and

- i. While the basis for signing the form as "Transporter" is not clear, the form itself only offers limited choices. It is believed that "Transporter" was selected as best describing the role of the Krummrich plant. As for entities involved in transportation, see Exhibit 3.6 and the other documents provided/referenced herein.

36B. [The EPA requests contain two different requests, both marked as "36". For purposes of clarity, they will be referred to as "36A" and "36B".] Provide the same information as requested in 35a - i [sic], above with regard to the RCRA Section 103(c) Notification of Hazardous Waste Site form for the Krummrich facility dated May 15, 1981.

RESPONSE:

- a. The precise location(s) of the landfill(s) referenced in this Notification are not known. It is believed that the company which was providing the disposal service had its offices located on Falling Springs Road and hence that office address may have been utilized as the location.
- b. The Notification described the information identified at that time as to disposal in the Sauget Area I Site. Any other information as to locations within the Sauget

37. On May 15, 1981, Monsanto also filed a Section 103(c) Notification for the disposal at Krummrich facility wastes at the W.G. Krummrich Landfill on Route 3. Describe how the wastes reported on this Notification differ from the wastes reported on the Notification filed for the Krummrich wastes disposed of at the Falling Springs landfill, referenced above in Request 36?

RESPONSE: The Section 103(c) Notification for disposal at the W. G. Krummrich Landfill on Route 3 pertains to disposal on Monsanto-owned property in a location outside of the Sauget Area I Site. This location has been previously designated by IEPA as Site R in the Sauget Area II Site. Accordingly, the wastes in this notification were apparently sent to a different location than that which was referenced in Request No. 36B above. The time period for use of the locations also appears to be different.

38. Identify and describe all past and present solid waste units (e.g., waste piles, landfills, surface impoundments, waste lagoons, waste ponds or pits, tanks, container storage areas, etc.) on the Krummrich facility property. For each solid waste unit identified, provide the following information:

materials or liquids containing or contaminated with hazardous substances, from the unit.

RESPONSE: Monsanto objects that this Information Request does not seek information related to the disposal or treatment of hazardous substances in the Sauget Area 1 Site. To the extent that hazardous substances were disposed of on the Queeny or Krummrich property, these materials are the subject of separate proceedings pursuant to the Resource, Conservation and Recovery Act (RCRA). Information relating to such activities have been provided to appropriate state and EPA offices and is available for review at those offices.

39. Provide copies of all local (e.g., Village of Sauget or Monsanto) environmental permits or licenses ever granted for the Krummrich facility or any part thereof.

RESPONSE: To the extent that such information is presently available, see Exhibit 3.7.

40. For each disposal of PCBs, material containing PCBs, PCB Articles, PCB Equipment, and PCB Containers (as defined at 40 C.F.R. § 761.3) from the facility or on facility property and which contained PCBs at concentrations of 50 ppm or greater, provide the following information:

41. Provide the following information for chlorobenzenes, chlorophenols, chloroanilines, nitrophenols, nitroanilines, and PCBs:

- a. A description of how the substance is or was generated and/or used at the facilities;
- b. An estimation of the quantity of the substance generated or used at the facilities;
- c. A description of Monsanto's storage, treatment, and/or disposal policies or practices for each substance throughout the operating history of the Queeny and Krummrich facilities;
- d. Any and all documents, reports, forms, permits or manifests indicating the substance's transportation to and/or disposal in Sauget Area I sites.

RESPONSE: Monsanto objects that the information requested is overbroad, irrelevant and without competent authority pursuant to Section 104(e) of CERCLA in that it seeks information which is not related to the treatment or disposal of hazardous substances in the Sauget Area I Site. Without waiving these objections, certain manufacturing information is included in Exhibit 3.2. Information, to the extent that it exists, on transportation and/or disposal in

- i. Description of any cleanup activities and summary of any post cleanup verification sample results;
- j. Disposition of any hazardous material from any cleanup;
- k. All reports, memoranda, or analysis concerning the spill, discharge or release.

RESPONSE: Monsanto objects that the information requested is overbroad, irrelevant and without competent authority pursuant to Section 104(e) of CERCLA in that it seeks information which is not related to treatment or disposal of material in the Sauget Area I Site. To the extent that such information does relate to the Sauget Area I Site, this information is otherwise provided/referenced herein. Furthermore, if such information exists, it would be the subject of separate spill reporting/cleanup proceedings pursuant to CERCLA, EPCRA, RCRA and/or state equivalents. Information relating to such activities would therefore have been provided to appropriate EPA and/or state offices and may be available for review at those offices.

- 43. For each pit, pond, lagoon, settling tank, oil/water separator, water treatment unit or similar structure located at the facilities, provide the following information:
 - a. Location and description of these areas or structures;

- k. Type of material and concentrations of releases or discharges;
- l. Description of any cleanup activities for releases or discharges;
- m. Summary of any post-cleanup verification sampling and disposition of material from the cleanup.

RESPONSE: Monsanto objects that the information requested is overbroad, irrelevant and without competent authority pursuant to Section 104(e) of CERCLA in that it seeks information which is not related to treatment or disposal of material in the Sauget Area I Site. To the extent that such information does relate to the Sauget Area I Site, this information is otherwise provided/referenced herein.

Furthermore, if such information exists, it would be the subject of separate spill reporting/cleanup proceedings pursuant to CERCLA, EPCRA, RCRA and/or state equivalents. Information relating to such activities would therefore have been provided to appropriate EPA and/or state offices and may be available for review at those offices.

- 44. Provide a copy of any annual documents required to be kept for the facilities in accordance with 40 C.F.R. § 761.180(a).

separate proceedings pursuant to the Resource, Conservation and Recovery Act (RCRA). Information relating to such activities have been provided to appropriate state and EPA offices and is available for review at those offices.

Information as to groundwater on or around the Sauget Area I Site itself is addressed in the Response to Request No. 47 below and in other documents provided/referenced herein.

46. Provide any information and documents you have generated or gathered (including documents obtained in discovery in lawsuit Cerro v. Monsanto Co., Docket No. 92-CV-204-WDS) about or in any way concerning the contamination found to exist in the Sauget Area I, including any information concerning the source of such contamination.

RESPONSE: This information is being provided as described in Monsanto's initial response on this matter dated August 24, 1994. See Exhibit 2.2.

47. Describe all measures taken by Monsanto or its consultants which have been taken to characterize, measure, sample or in any way test for the presence of hazardous materials at or around Sauget Area I. Provide the results of such testing.

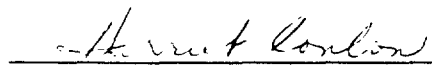
VERIFICATION

STATE OF MISSOURI)
) ss
COUNTY OF ST. LOUIS)

Stephen P. Krchma, being duly sworn, deposes and says that he has read the foregoing "Monsanto's Response to Request for Information Concerning Sauget Area I, Sauget, Illinois" and is familiar with the contents thereof; that the deponent is without personal knowledge of the matters stated in the foregoing "Monsanto's Response to Request for Information Concerning Sauget Area I, Sauget, Illinois"; that the foregoing "Monsanto's Response to Request for Information Concerning Sauget Area I, Sauget, Illinois" has been assembled by authorized employees and counsel of Monsanto Company who have informed deponent that the foregoing "Monsanto's Response to Request for Information Concerning Sauget Area I, Sauget, Illinois" is true; and that to the best of deponent's knowledge this "Monsanto's Response to Request for Information Concerning Sauget Area I, Sauget, Illinois" is true.


Stephen P. Krchma

Subscribed and sworn to before me
this the 17th day of October, 1994.



Notary Public in and for said
County and State

HARRIET CONLON
Notary Public — Notary Seal
STATE OF MISSOURI
ST. LOUIS COUNTY
My Commission Expires August 15, 1998